

# THE SENTINEL



OFFICIAL SAFETY NEWSLETTER OF CIVIL AIR PATROL

## AETC Safety Workshop

I recently attended a Safety Workshop at Air Education and Training Command (AETC), the Air Force Major Command that sponsors Civil Air Patrol. I had the opportunity to meet MGen Lee McFann, Air Force Chief of Safety and Commander of the Air Force Safety Center, and many other safety professionals from across AETC. What struck me was that the Air Force wrestles with many of the same problems facing CAP:

**Building a safety culture** can dramatically affect mishap prevention. AETC has an advantage, as they touch almost every AF member as they enter military service. Their concept is to indoctrinate early and reinforce the culture throughout the years of service. Their motto is *"From Day One—Safety Always"*. The required ingredients for an effective culture are:

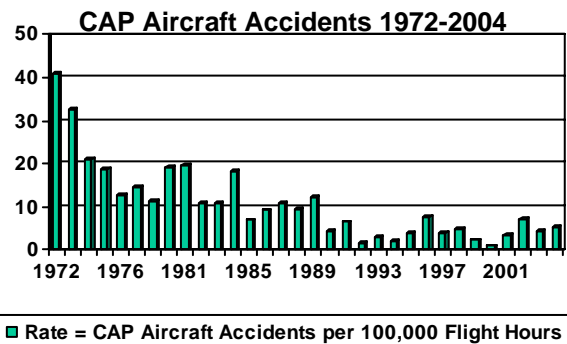
- ✓ Visionary leadership
- ✓ Responsibility and accountability
- ✓ Attract the right people
- ✓ Develop your people
- ✓ Straight talk
- ✓ Foundation of integrity

**Human Factors** are AETC's #1 target in their mishap prevention efforts. Human factors were involved in 100% of their class A mishaps and 90% of their fatalities. The term "human factors" has grown increasingly popular as the aviation industry has realized that human error, rather than mechanical failure, underlies most aviation accidents and incidents. Human factors involves gathering information about human abilities, limitations and other characteristics and applying it to tools, machines, systems, tasks, jobs, and environments to produce safe, comfortable, and effective human use. In aviation, human factors is dedicated to better understanding how humans

can most safely and efficiently be integrated with technology. That understanding is then translated into design, training, policies, or procedures to help humans perform better.

Human factors is also a big target in CAP. All six of our aircraft accidents involved causal human factors. We are addressing this challenge with CRM training from FlightSafety International and the CAP CRM Seminar In A Box. CRM will become even more important as technology in our cockpits becomes more sophisticated (and possibly more distracting) with the purchase of new electronic goodies for our aircraft.

**No low hanging fruit** is how AETC Chief of Flight Safety, Major Kim "Psycho" Thein describes the attempt to break below the current plateau in aviation mishaps. CAP has also experienced somewhat of a plateau as seen in this chart:



The Air Force is using Military Flight Ops Quality Assurance (MFOQA), a collection and analysis of all operational and maintenance flight data to detect precursors to aviation mishaps. MFOQA will identify aircrew skill-based errors and equipment deficiencies before an accident happens and provide feedback on mitigation measures. While CAP probably can't afford MFOQA, we can break below our plateau using CRM and Error Management to reduce human factors.



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**No new mishaps** are occurring in AETC. This also applies to CAP. We must re-learn old lessons if we expect to break below the plateau.

**Wildlife strikes** are on the increase for both organizations. CAP bird strikes were up 6-fold in FY04. 2 out of 3 CAP vehicle mishaps this year have involved deer. As the human population increases in this country, we push wildlife into smaller areas and we cross paths on a more frequent schedule. A great resource for determining bird strike risk in the continental U.S. is the Avian Hazard Advisory Service (AHAS) at: <http://www.usahas.com/>. AHAS is a national radar bird detection system for the US Air Force.

**Maintenance mishaps** are also on the rise in both organizations. These usually occur because a mechanic is in a hurry, takes a shortcut or doesn't follow procedures in a maintenance manual. It reminds me of the saying, "There's always time to do it right the second time." Maintenance mishaps cost the AF \$24M last year. CAP had 5 mechanical failures last year. The most remarkable episode was a wing installation error on an SGS 2-33A. The wing failed on takeoff, but no one was injured.

Mishap prevention targets of opportunity are numerous in both the AF and CAP. It is my opinion that training and a constant campaign against human error will yield our best results.

## AOPA's Safety Hot Spot

The Aircraft Owners and Pilots Association (AOPA) Air Safety Foundation has a great new feature called Safety Hot Spot where different aviation safety topics are thoroughly discussed each month. Check out the current subject, *Flying Night VFR*, at: <http://www.aopa.org/asf/hotspot/>. Flying squadrons could do an entire flight safety meeting on the latest Safety Hot Spot, as articles, videos, quizzes and supportive accident reports are made available in one convenient spot! AOPA's Air Safety Foundation has a winner here.

## Deer Collisions On The Rise

According to the National Safety Council, there were 520,000 animal-related accidents last year; up from 490,000 the previous year. Deer are most active in the fall and winter months, as they search for food and experience the rut. Dur-

ing the past quarter, CAP vehicles struck deer twice. The Insurance Information Institute (III) suggests the following defensive tips to avoid hitting a deer:

- Be especially attentive early morning and evening, the most active time for deer.
- Know when the rut occurs in your geographic area and use extra caution during this time.
- Be alert and drive with caution in deer-crossing zones. Look for other deer after one has been seen, as they seldom run alone.
- If time allows, slow down and blow your horn with one long blast to frighten deer away.
- Brake firmly when you notice a deer in or near your path, rather than swerving off the road or into oncoming traffic
- Wear your seat belt. Most serious injuries in car/deer crashes occur because people were not wearing their seat belt.
- After a collision, don't approach a wounded deer. Move your car off the road and call police.

## Pocket Bikes Illegal on Public Highways

With the recent media attention surrounding mini motorcycles, or pocket bikes, the Motorcycle Safety Foundation (MSF) would like to remind owners and potential purchasers, parents in particular, that these machines cannot be legally ridden on public roadways. Pocket bikes are not manufactured to meet U.S. Department of Transportation Federal Motor Vehicle Safety Standards. They do not have lights or turn signals, and are not manufactured to comply with federal emissions or noise standards. A primary hazard is that the bikes are so small, and the rider sits so low, that other motorists may not see them at all. They are designed for use on racetracks and private property only. Please don't allow friends or family to operate these machines on public roads!

## Other Safety Meeting Topics:

- **Hypothermia - Prevention, Recognition and Treatment**  
<http://www.hypothermia.org/>
- **Eye Injuries in the Wilderness**  
<http://www.emedicinehealth.com/articles/27728-3.asp>
- **Snow Blindness**  
<http://www.henryfordhealth.org/115039.cfm>

**"I'd rather be careful a hundred times,  
than be killed once" - Mark Twain**